



## OSMIUM TETROXIDE

<b>Agent Overview:</b>	Osmium tetroxide is a colorless to pale yellow crystalline solid with a pungent, chlorine-like odor and acts as a corrosive chemical, producing rapid injury. It is used a tissue fixative for electron microscopy, as catalyst sources for certain reactions; and to treat rheumatism. Onset of signs and symptoms is usually rapid. Signs and symptoms include dermal (black marks on skin, dark wound base/grey-brown deposits in wounds, painful dermatitis, tissue necrosis), ocular ("halos", "scratchy" or painful sensation in the eyes), respiratory (burning sensation in lungs, dyspnea, inflammation/necrosis of the trachea, bronchi, and lung; edema, coughing); and lacrimation, headache and abdominal cramps.
<b>Lab Specimen Submittal:</b>	Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.
<b>Type of Specimens Necessary for Testing:</b>	<u>Urine:</u> 25mL-50mL screw-cap container <u>Whole blood:</u> <ul style="list-style-type: none"><li>- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND</li><li>- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND</li><li>- Two empty urine cups and two empty blood tubes for each lot # submitted.</li></ul>
<b>Packaging Instructions:</b>	<u>Urine:</u> freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material. <u>Whole blood:</u> place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but <i>must not</i> be frozen. <u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).
<b>Receiving Specimens at DPHL:</b>	Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.
<b>Handling of Specimens:</b>	Chain of custody procedures must be followed. Urine specimens should be frozen upon collection.
<b>Reporting Results:</b>	Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.
<b>Contact Information:</b>	Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)